Encouraging Success

Ensuring Aboriginal Youth Stay in School

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BUILDING THE NEW WEST

As part of the **Building the New West Project,** the Canada West Foundation is conducting the *Aboriginal Human Capital Strategies Initiative*, a one-year research study exploring the importance of Aboriginal people to helping meet western Canada's human capital needs. The objective of the research is to increase the availability and quality of information regarding labour market opportunities for western Canada's Aboriginal population, with an emphasis on positive, cooperative approaches that can be utilized to improve outcomes. *Encouraging Success: Ensuring Aboriginal Youth Stay in School* is the second of three reports to be released under the Aboriginal Human Capital Strategies Initiative.

Ongoing advice for the project is provided by an Advisory Committee consisting of Paul Bercier (Metis National Council), Jim Carr (Business Council of Manitoba), Tara Gilbert (Aboriginal Community Career Employment Services Society, ACCESS), Wayne Helgason (Social Planning Council of Winnipeg), Roberta Hewson (Partners for Careers), Eric Howe (Department of Economics, University of Saskatchewan), Carlos James (Government of Manitoba), John Kozij (Human Resources and Development Canada), Gerry Kushlyk (Alberta Aboriginal and Northern Affairs), Kelly Lendsay (Aboriginal Human Resource Development Council of Canada), Allan MacDonald (Privy Council Office), Ray McKay (Kitsaki Management Ltd. Partnership), Bill McLaughlin (Northlands College), Lisa Nye (BC Community, Aboriginal and Women's Services), John Richards (Faculty of Business Administration, Simon Fraser University), Noel Starblanket (Assembly of First Nations), and Ian Taylor (Congress of Aboriginal Peoples). The views expressed in this document are not necessarily held in full or in part by the advisory committee members or the organizations they represent.

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EXECUTIVE SUMMARY

All Canadians have a vested interest in ensuring Aboriginal people are provided every opportunity to compete fully and successfully in the labour market. And education is an essential building block to achieving positive labour market results: it is closely linked to labour force outcomes, employment incomes and also serves as a general quality of life indicator.

Unfortunately, many Aboriginal people in Canada lack the human capital – that is, the education, training and skills – needed to successfully obtain and retain employment in the Canadian economy. And as the Aboriginal population, especially in the West, is younger than the non-Aboriginal population, there will be a large influx of Aboriginal youth into the labour force over the coming years. Successful Aboriginal human capital outcomes will help alleviate future labour market shortages in western Canada. *Encouraging Success* identifies both the education and the labour force realities surrounding Aboriginal individuals in the West.

Aboriginal people who earn higher certificates, diplomas or degrees, without exception earn higher incomes and have a better chance of gaining employment. And the education benefits extend beyond the individual to the Canadian economy as a whole, through reductions in social service expenditures and increased economic prosperity. These findings reinforce the fact that high returns to Aboriginal education exist for all Canadians.

The key challenge lies in devising and implementing strategies that are effective in ensuring Aboriginal youth attain high education levels. Approximately 50% of Aboriginal people in the West have less than a high school graduation certificate; of Aboriginals aged 17-19 this figure increases to 75% – a significant majority of the high school-completion cohort. In addition, where Aboriginal people live affects their education, employment incomes and labour force outcomes. On-reserve residents are likely to have left school sooner than off-reserve residents: more than twice as many Aboriginal people on-reserve withdrew before grade nine. As well, on-reserve employment and income levels, in general, are lower than those off-reserve, although this disparity disappears at the university degree level.

These findings reinforce the fact that status quo policies do not sufficiently address the human capital needs of Aboriginal youth. Strategies that will improve Aboriginal education and labour outcomes have to increasingly focus on what works. The key to ensuring success lies in tapping into the expertise of those individuals directly involved, and this is the basis for the promising practices identified in *Encouraging Success*.

The promising practices provide a general blueprint of ideas and strategies that work: policy-makers and other organizations should consider them when seeking to improve human capital opportunities for Aboriginal youth.

The practices concentrate on a wide variety of Aboriginal education and labour programming areas, but the bottom line is the same: positive progress needs to begin at the ground level. The incentives of all individuals and groups involved must be taken into account at the onset of education and labour initiatives, especially those with partnership components – for just as no two individuals are identical, neither are any two businesses. Significant investments of time, financial resources and personal effort are required to ensure success, but none the less the individual, economic and social returns to these investments are likely to exceed the costs. Ensuring that Aboriginal people have the education, training, and skills necessary to fully participate in the economy is one of Western Canada's most important challenges.

INTRODUCTION

Education is widely considered to be an essential building block to future labour market outcomes. It is closely linked to economic prosperity and also serves as a general quality of life indicator. Unfortunately, many Aboriginal people in Canada lack the human capital – that is, the education, training and skills – needed to successfully obtain and retain employment in the Canadian economy. Previous Canada West research has identified that Aboriginal people in Canada withdraw from education sooner than the general population – approximately 50% of Aboriginals have less than a high school graduation certificate, compared to 30% of the general population (Brunnen 2003). Low Aboriginal education levels are a particularly acute challenge for western Canada, where 62% of the Aboriginal population resides.

Multiple benefits can accrue as a result of ensuring that Aboriginal individuals are provided every opportunity to earn higher education levels, not the least of which include direct quality of life improvements for Aboriginal people. In addition, industry experts and labour market analysts have forecasted that Canada will experience a sizable labour supply shortage in the decades ahead. The Aboriginal population being younger than the non-Aboriginal population (especially in the West) poses a unique solution to alleviate future labour shortages in western Canada, as there will be a large influx of Aboriginal youth into the labour force in the coming years. Therefore all Canadians, Aboriginal and non-Aboriginal alike, have a vested interest in ensuring Aboriginal individuals achieve positive human capital outcomes. The key challenge lies in devising and implementing strategies that are effective in ensuring Aboriginal youth attain high education levels.

To achieve this end, it is important to understand precisely the education and labour market realities facing Aboriginal youth. What demographic characteristics influence outcomes? What are the economic implications of higher educational attainments? What are the successful strategies that can be employed to ensure positive outcomes? *Encouraging Success* seeks to answer the following questions:

- *When do Aboriginal youth withdraw from education?*
- *What are the labour force and employment income implications for those who withdraw from education early?*
- *What are the promising practices for encouraging Aboriginal youth to remain in school?*

The answers to these questions will be of significant value to policy-makers, educators and members of Aboriginal organizations and communities when designing policies and programs to ensure Aboriginal youth stay in school. *Encouraging Success* identifies how the educational attainments of Aboriginal youth vary by demographic characteristics such as area of residency, age cohort and Aboriginal identity group, and will determine the extent to which labour force and employment income variations occur as a result of these contributing factors. Finally, by devising a list of promising practices, *Encouraging Success* provides a foundation for actionable solutions that governments and other organizations can use to improve the human capital achievements of Aboriginal youth.

Encouraging Success is the second of three Canada West Foundation reports to be published under the *Aboriginal Human Capital Strategies Initiative* – a one-year ***Building the New West Project*** research initiative that explores the human capital opportunities for western Canada's Aboriginal population. The first report, *Achieving Potential: Towards Improved Labour Market Outcomes for Aboriginal People*, outlined the current education and labour market realities facing Aboriginal adults in the economy and identified seven promising practices for improving outcomes for Aboriginal people in the current labour market (Brunnen 2003). The third and final report, which will be released early in 2004, examines key trends in Aboriginal labour market outcomes, summarizes the public policy implications of the findings of the *Aboriginal Human Capital Strategies Initiative*, and provides policy recommendations to address both short and long-term Aboriginal human capital issues.

METHODOLOGY

The 2001 Census is the primary data source for satisfying this report's first two research questions, that is when do Aboriginal youth withdraw from education, and what are the labour force and employment income implications for those who withdraw from education early? Despite the limitations of the Census (which include incomplete on-reserve enumeration and the potential for under-counting off-reserve in urban and rural areas) it remains the most accurate and comprehensive source of quantitative information available about the Aboriginal population of Canada.

Readers should note that the Aboriginal identity population, which consists of those individuals who report identifying with at least one Aboriginal group (e.g. North American Indian, Métis and Inuit), is the measure used as the Aboriginal population throughout this report. (The Census also collects data on the Aboriginal origin population, defined as those individuals who report at least one Aboriginal origin to the ethnic origin Census question. Ethnic origin refers to the ethnic or cultural groups to which the respondents' ancestors belong. The Aboriginal origin population in Canada reported in 2001 is 1,319,890 people, while the 2001 Aboriginal identity population in Canada is 976,305 people.) Throughout the education and labour market analyses, unless otherwise specified, the data include individuals 15 years and older who are currently not attending school, and comparisons are made between the Aboriginal and general (Aboriginal and non-Aboriginal) populations.

To satisfy the third research question of this report (what are the promising practices to encourage Aboriginal youth to stay in school?), the Canada West Foundation has identified "promising practices," that is, ideas, strategies and concepts that work in improving the employment outcomes of Aboriginal youth. These promising practices are based on evidence from 25 key informant interviews conducted between March and June 2003 by the Canada West Foundation. Information from the interviews was supplemented by documents provided by interview subjects and other organizations, as well as a review of relevant literature. Interview subjects were chosen using the snowball method of non-probability sampling, and included government representatives, educators at primary, secondary and post-secondary institutions, representatives of private industry, Aboriginal awareness seminar providers, Aboriginal and non-Aboriginal service delivery organizations, and members of Aboriginal political organizations.

In addition, information from the 109 interviews conducted between February and July 2002 for the Canada West Foundation report entitled *Uncommon Sense: Promising Practices in Urban Aboriginal Policy-Making and Programming* (Hanselmann 2002) was taken into consideration as a result of overlap between the two sets of information. Interviewees were asked to identify and discuss things – for example, policies, principles, committees, initiatives, agreements, guidelines, strategies, approaches, technologies, instructive resources, programs, and research – that seem to work for improving Aboriginal labour market outcomes, and to explain why. The information from the interviews and the literature was distilled into common themes to identify ideas that work and that can be applied to facilitate positive outcomes for Aboriginal youth in the future labour market – i.e., promising practices. They are derived from qualitative methods in order to take into account the experiences and expertise of individuals directly involved in Aboriginal labour market areas, and to ensure the inclusion of factors not captured in quantitative data.

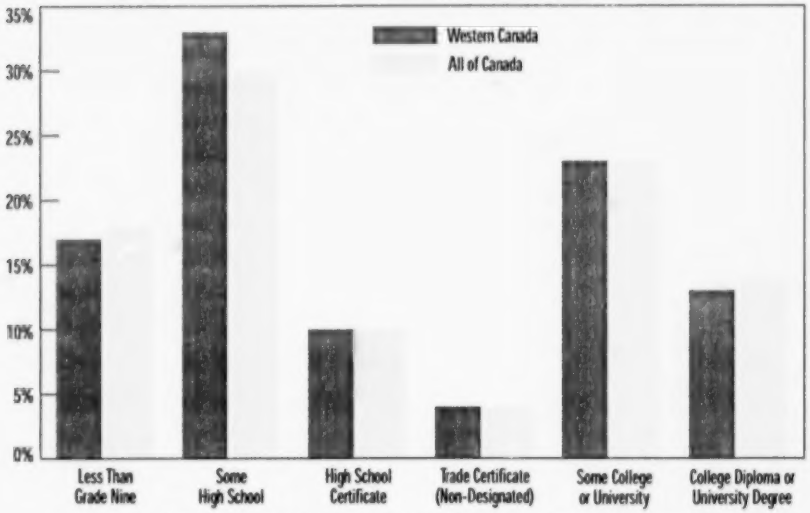
WHEN DO ABORIGINAL YOUTH WITHDRAW FROM EDUCATION?

Previous research performed by the Canada West Foundation identified some of the education and labour market realities facing Aboriginal individuals in the economy (Brunnen 2003). The percentage of Aboriginal individuals in western Canada with less than a high school diploma is considerably greater than that of the general population. In 2001, 49.8% of the Aboriginal population in the West who were over 15 and not attending school, possessed less than a high school diploma compared to 31.3% of the general population. It follows that Aboriginal representation in the post-secondary attainment categories was well below that of the general population. As well, although Aboriginal individuals in the West participated in the labour force at a similar rate as the general population, the Aboriginal unemployment rate was three times greater. Canada West's research also finds that Aboriginal individuals with higher educational attainments were more likely to have earned higher employment incomes and experience positive employment outcomes (as is the case with all Canadians).

To ensure positive labour market opportunities exist for Aboriginal youth, it is not only important to understand precisely what the current education and labour market realities are, but also how outcomes vary by residency and other population factors. Thus the analysis in this section examines how Aboriginal educational attainments vary with respect to regional, on-reserve/off-reserve variations, age and identity group differences.

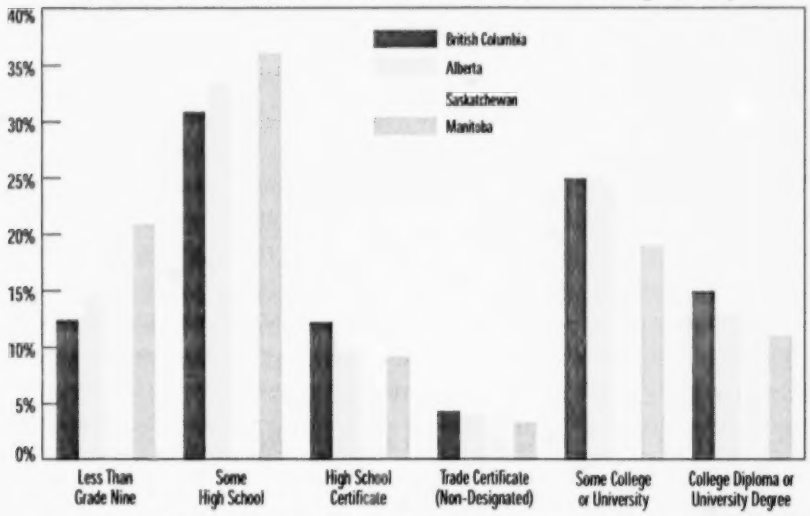
It is important to note that the data in this study represents information current as of the 2001 census. Although differences

FIGURE 1: Educational Attainment of Aboriginal People in Canada



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

FIGURE 2: Educational Attainment of Western Canadian Aboriginal People



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in education levels by area of residency may reflect differing educational services available in a particular area, it is not a foregone conclusion. Individuals may have earned their education in an area other than their place of residency at the time of the Census. However high mobility is a characteristic often associated with higher education levels.

When comparing the educational attainments of the Aboriginal population in the West to that of Canada as a whole *(Figure 1)*, Aboriginal students in both are most likely to have left school between grades 9 and 12, although in the West the proportion of Aboriginal individuals represented in this category is higher. When the data are disaggregated into smaller education categories, for both the West and Canada, it is between grades 9 and 10 that Aboriginal individuals are most likely to have withdrawn from education. What is interesting is the variation that exists between the West and Canada as a whole for other levels of education. For instance, Aboriginal individuals in the West are less likely to have graduated from post-secondary institutions. They are also slightly less likely to have withdrawn prior to grade 9. These are important variations to note, especially given that the majority of the Aboriginal population resides in the West.

Of course, looking at western Canada as a whole masks a number of important variations within the region, including provincial, on-reserve and off-reserve differences, age cohort and identity group differences. It is to the influence of these variables that the analysis now turns.

1. Provincial Variations

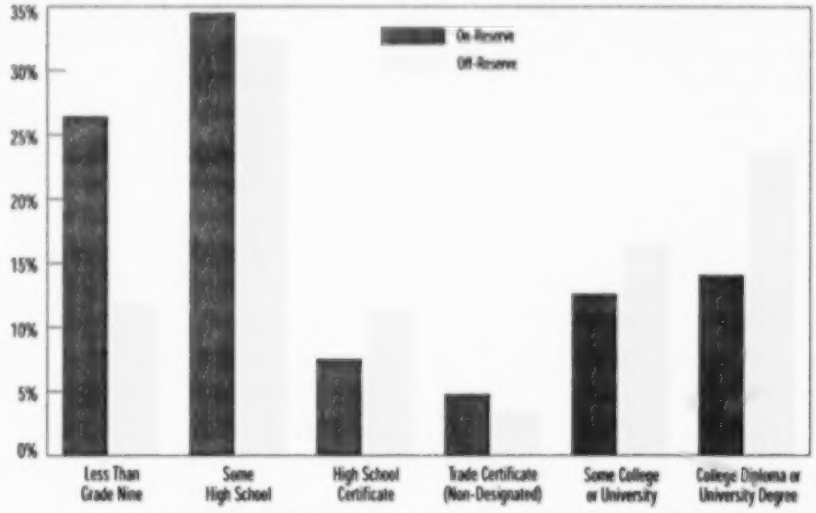
When viewing variations in Aboriginal educational attainments by western province, the data indicate that from east to west the proportion of Aboriginal individuals with less than a high school diploma decreases. This is exemplified in *Figure 2* where over 55% of Aboriginal residents in Manitoba possess less than a high school diploma, compared to approximately 42% in British Columbia. As well, although Aboriginal students are most likely to have withdrawn from education between grades 9 and 10, Aboriginal residents in Alberta and British

Columbia are less likely to have left school before grade 10, and are more likely to have earned a high school graduation certificate, or a college diploma. However, Aboriginal residents in Saskatchewan are the most positively represented in the university attendance categories, and students in Alberta are least likely to have attended university. These results have interesting policy and programming implications for the provinces, and it is useful to identify some of the determinants of these variations.

2. On-Reserve, Off-Reserve, and Area of Residence Variations

The quality and availability of educational facilities on-reserve and off-reserve vary significantly, and this is evidenced in Aboriginal educational attainment differences by residency. In the West as a whole, Aboriginal education levels off-reserve are higher than those on-reserve *(Figure 3)*. Over 60% of on-reserve residents have withdrawn from school prior to earning a high school graduation certificate – a strong contrast to the 45% of off-reserve residents.

FIGURE 3: Educational Attainment of Western Aboriginal People by Residence



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

Of even more concern is the fact that the on-reserve population is consistently under-represented in all of the post-secondary attainment categories, with the sole exception being the non-designated trade category. This most likely reflects the fact that reserve communities have relatively good access to trade programs, although it should be noted that high school completion is not required to earn a non-designated trade certificate.

To explore further how educational attainment differs by residency, an index of off-reserve/on-reserve variations is presented for each of the provinces and for the West as a whole *(Figure 4)*. An index value greater than one is indicative of proportionately higher off-reserve representation in the category, while an index value less than one is indicative of less off-reserve representation in the category. An index value equal to one indicates that residency representations are equal.

Off-reserve residents in each western province are considerably more likely to have obtained a high school graduation certificate, and are at least twice as likely to have obtained a university degree (with the exception of Manitoba at 1.91). In no instance is the off-reserve population likely to have withdrawn from school before grade 10 to the same degree as the on-reserve population. Hence, in each western province the educational outcomes of on-reserve residents are consistently less positive than those of off-reserve residents.

Do educational attainment differences exist between urban and rural off-reserve Aboriginal residents? In short, yes. Many studies have shown that educational attainments of rural Canadians are in general lower than those of urban Canadians, and that one of the reasons for this variation has to do with access to education services. The Aboriginal population is no exception. In the West, although the variation is less pronounced, the urban/rural representations in each of the education categories mirror those of the off-reserve/on-reserve analysis.

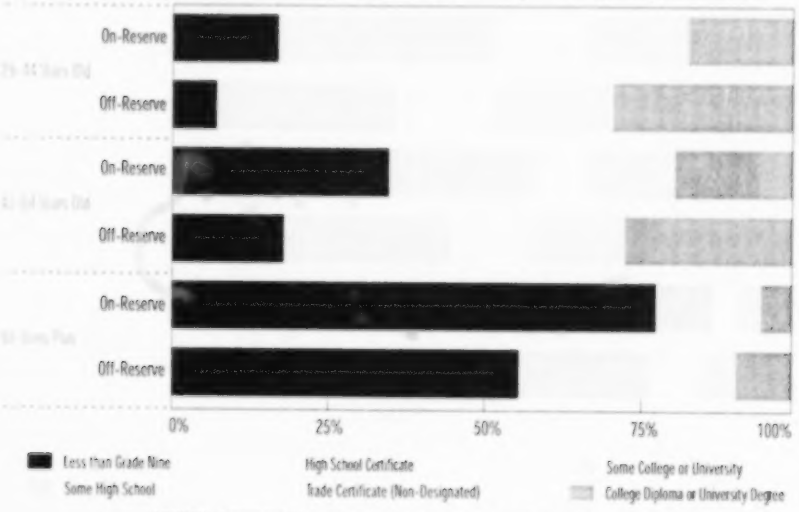
FIGURE 4: Residency Index
(Aboriginal People in Western Canada)

Less Than Grade Nine	0.45	0.48	0.42	0.49	0.47
Some High School	0.95	0.96	0.92	1.03	0.91
High School Certificate	1.51	1.19	1.91	1.38	1.88
Trade Certificate (Non-Designated)	0.74	0.62	0.74	0.65	1.02
Some College or University	1.32	1.26	1.34	1.31	1.32
College Diploma	1.75	1.36	1.85	1.68	2.36
University Degree	2.09	2.54	2.11	2.11	1.91

SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

Urban Aboriginal residents are more likely to have attended post-secondary institutions, and rural Aboriginal residents are more likely to have withdrawn from school prior to grade ten. The primary divergence occurs in the college diploma category, where rural residents are more likely to obtain a college diploma than urban residents. Aboriginal residents both on-reserve and in rural areas are the most likely to obtain non-designated trade certificates – a variation that has strong implications for labour market outcomes.

FIGURE 5: Educational Attainment of Western Aboriginal People by Residence



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3. Age Cohort Variations

A sizable contrast exists for educational attainments among age cohorts *(Figures 5 and 6)*. Individuals between the ages of 25-64 display the most positive educational outcomes of all the age groups – over 25% have obtained a college diploma or university degree, and this is an encouraging finding given that these are the individuals of primary labour force age.

As has been noted, residents on-reserve are likely to have withdrawn from education sooner than residents off-reserve for all age groups. Of specific interest are the attainment levels for Aboriginal people 65 and older living on-reserve, where approximately 85% have not completed high school – the highest proportion in any cohort, and although this cohort will not directly participate in the future labour force, as elders and grandparents these individuals have influence over the educational decisions of the youth.

The residency distinctions become particularly acute for Aboriginals aged 15-24 *(Figure 6)*. Over 70% of those on-reserve have left school prior to obtaining a high school certificate, contrasted against approximately 55% off-reserve. Of these, approximately 15% of 15-16 year olds off-reserve have left school before grade 9, a strong contrast against the 35% of 15-16 year olds on-reserve. In total, nearly 75% of Aboriginals 17-19 years old have less than a high school diploma, which is a significant majority of the high school completion cohort. This raises an alarming issue: this young Aboriginal cohort withdraws from education at a very early stage, and it is in fact likely that some of these students are leaving school well before labour force age.

Explanations for the early withdrawal of urban Aboriginal youth from primary and secondary programs are given in a Statistics Canada report on the initial findings of the 2001 Aboriginal Peoples Survey (O'Donnell and Tait 2003), which notes that of Aboriginal youth 15-19,

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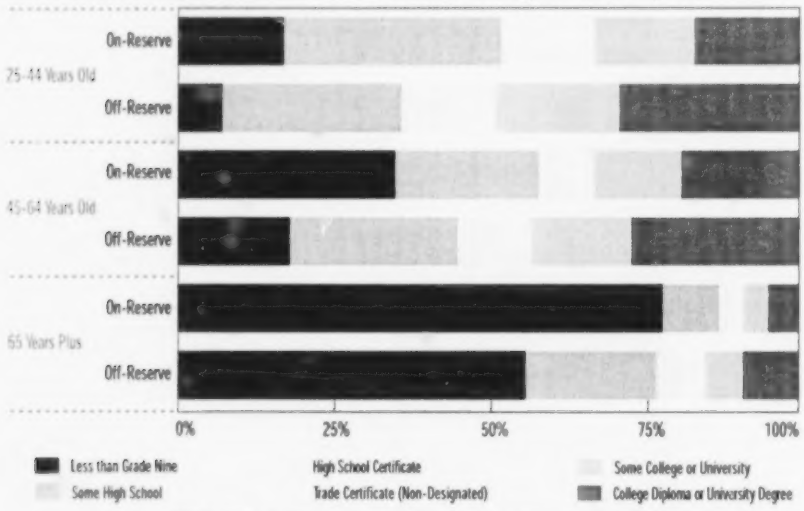

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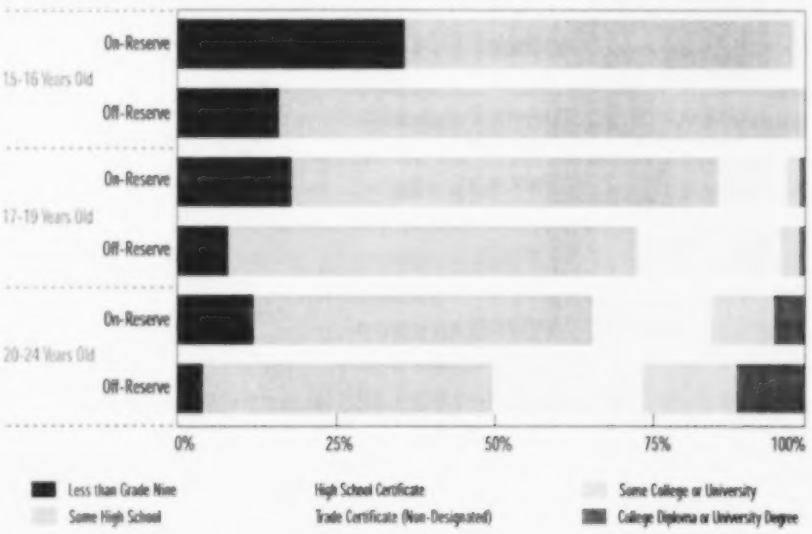
Explanations for the early withdrawal of urban Aboriginal youth from primary and secondary programs are given in a Statistics Canada report on the initial findings of the 2001 Aboriginal Peoples Survey (O'Donnell and Tait 2003), which notes that of Aboriginal youth 15-19,

24% of males and 15% of females said they left school out of boredom, 19% of males said they wanted to work, and 25% of females cited pregnancy as the reason. The study further states that many 15-19 year olds who withdraw before finishing high school are likely to eventually return to complete their studies later in life. This result manifests itself in the 20-24 category in *Figure 6*, which displays relatively higher education levels in comparison to the other youth cohorts.

FIGURE 6: Educational Attainment of Western Aboriginal People by Residence



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Residency data have significant implications for the educational attainment variations in the western provinces. Manitoba and Saskatchewan, the two provinces with the highest proportion of individuals residing on-reserve (37.0% and 38.8% respectively), display the highest incidence of Aboriginal individuals withdrawing before grade 10 – a phenomenon that is consistent with the educational attainment patterns for on-reserve residents. Yet Alberta and British Columbia exhibit a higher proportion of individuals having earned a high school certificate or college diploma, which is consistent with the higher urban Aboriginal populations within these two provinces (56.6% and 55.1% respectively).

There are two interesting deviations, however. In both Manitoba and Saskatchewan the proportion of individuals having earned a university degree is greater than or equal to that in Alberta and British Columbia, the two provinces with the lowest proportion of on-reserve residents. In addition, British Columbia has the highest proportion of individuals having earned a non-designated trade certificate – an educational attainment more prominent among on-reserve residents than off-reserve residents. Hence, these results indicate that although on-reserve and off-reserve variations have a strong influence over educational attainments, other contributing factors exist.

4. Identity Group Variations

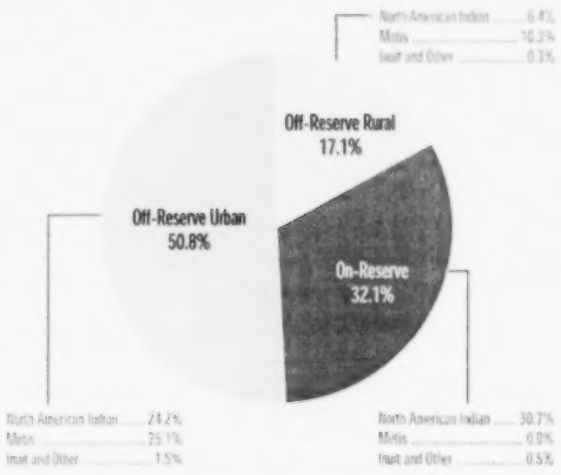
Given the sizable differences in educational outcomes between urban, rural and on-reserve residents, the question arises: to what extent are these variations manifested among identity groups? The identity group to which an individual belongs may influence educational outcomes through variations in access to educational services or funding, or through historical or cultural differences that result in differences in affinities to attend school. In total, 61.3% of the West's Aboriginal population over 15 not attending school identifies as North American Indian, 36.2% identifies as Métis, and only 2.3% identifies as Inuit and other.

The geographic distributions of the North American Indian, Métis and Inuit Aboriginal identity groups for the West are presented in *Figure 7*. The vast majority of individuals who reside on-reserve identify as North American Indian (96.0%), while 37.6% of Aboriginal people in rural areas are North American Indian and 60.6% are Métis, and 42.1% in urban areas are North American Indian and 55.2% are Métis.

To assess variations in educational attainments among identity groups while controlling for the influence of on-reserve and off-reserve variations, the Aboriginal identity population is separated into four categories: North American Indians on-reserve; North American Indians off-reserve; Inuit and others; and Métis *(Figure 8)*.

Individuals in the Métis single response group display the most positive educational attainments of all the identity groups: Métis are the least likely to have withdrawn from education prior to earning a high school graduation certificate, and most likely to have earned a post-secondary diploma or degree. Those who identify as North American Indian living off-reserve are the most likely of all the identity groups to have attended university and earn a university degree, and the least likely to have earned a non-designated trade certificate. The lower post-secondary attainments for the on-reserve group are particularly noteworthy, as educational opportunities on-reserve are often limited and therefore on-reserve residents likely have to transfer off-reserve to attend colleges and universities.

FIGURE 7: Aboriginal Residency in the West

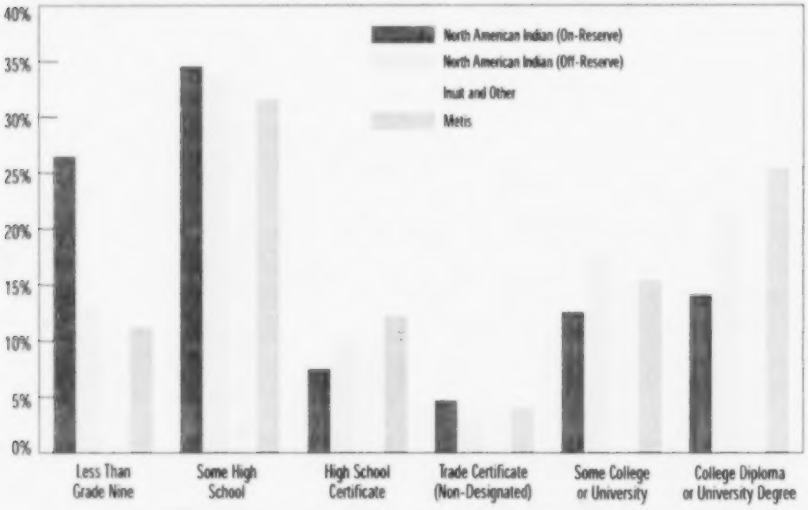


SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

Of the three off-reserve identity group categories, no group in particular displays proportionately negative educational outcomes. In fact, all three off-reserve response groups exhibit consistently higher post-secondary participation (with the exception of the non-designated trade certificate category), and consistently lower incidences of withdrawal below grade 10 (with Métis least likely to withdraw prior to grade 10), relative to the on-reserve group.

What do these results suggest about the influence of one's identity group in relation to educational outcomes? Clearly, the Aboriginal group to which an individual identifies is not a decisive factor in influencing educational attainments. Rather, it is in the on-reserve and off-reserve variations where educational outcomes differ; all off-reserve identity groups exhibit similar educational attainments.

FIGURE 8: Educational Attainment of Western Aboriginal People by Identity



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EDUCATIONAL ATTAINMENT: Summary of Key Findings

The analysis regarding the educational attainment of Aboriginal people has revealed the following:

- In both the West and Canada as a whole, Aboriginal students are most likely to withdraw from education between grades 9 and 10, but western Aboriginal individuals are less likely to have earned post-secondary diplomas or degrees.

- Educational attainments for on-reserve residents are consistently lower than those for off-reserve residents in all age cohorts. More than twice as many Aboriginals living on-reserve have left school before grade nine compared to Aboriginals living off-reserve.

- Within specific age groups, Aboriginal people 25-64 years old exhibit the highest educational attainments of all the age groups: approximately 25% have obtained a college diploma or university degree, and this is a positive finding given that these are the individuals of primary labour force age.

- Age cohort distinctions become particularly acute for Aboriginals aged 17-19: in total, nearly 75% of this group have earned less than a high school diploma, which is a significant majority of the high school completion cohort.

- While an individual's area of residence has a larger influence on educational outcomes than Aboriginal identity, the Métis response group is the most likely identity group to have earned a high school certificate or a post-secondary diploma or degree.

These findings raise some important issues: what impact do specific educational outcomes have on labour force success rates? Do labour force gaps exist between the Aboriginal and general populations for all educational attainments? Do labour force and income benefits of higher education extend equally to all Aboriginal individuals in the West, both on-reserve and off-reserve? It is to these questions that the analysis now turns.

EFFECTS OF WITHDRAWING FROM EDUCATION

Education is an essential building block to future labour market outcomes. It is closely linked to positive labour force outcomes, higher employment incomes and also serves as a general quality of life indicator. Therefore it is important to understand the extent to which higher educational attainments for Aboriginal people in the West lead to improved labour market outcomes. This section analyses the employment and income implications associated with Aboriginal education attainments.

1. Labour Force Implications

To examine the relationship between educational attainments and labour force outcomes, an analysis of the three most common labour force measurements – the participation rate, the employment rate and the unemployment rate – needs to be undertaken *(see below)*. To reiterate, the population used in these analyses consists of the Aboriginal identity population 15 years and older who are currently not attending school.

LABOUR FORCE MEASUREMENTS

Participation Rate: The participation rate is defined as the number of individuals in the labour force (both employed and unemployed) divided by the population 15 years and older. The participation rate in general provides an indication of a group's affinity to actively seek employment and/or be employed, and implies variations in individuals' propensities to attend school, retire or become homemakers. In addition, analysis of the participation rate may detect the presence of the "discouraged worker phenomenon" – the idea that an individual withdraws from the labour force after a long period of unsuccessful job searching.

The Employment Rate: The employment rate is defined as the number of people employed divided by the population 15 years and older. In other words, the employment rate considers the full population 15 and older, including those participating in the labour force and those who, for whatever reason, are not participating in the labour force. It provides a useful indication of the labour force outcomes of a particular group, especially when compared to the participation rate. As the employment rate approaches the participation rate, the number of people who are unemployed but actively seeking employment declines.

The Unemployment Rate: The unemployment rate is defined as the number of people unemployed divided by the number of people participating in the labour force (both employed and unemployed). The unemployment rate is useful in that it measures discrepancies only within the labour force; it excludes individuals who have chosen to opt out of the labour force, be it for retirement, child rearing, or for any other reason. In other words, one must be actively looking for work to be "unemployed."

To assess variations in educational attainments among identity groups while controlling for the influence of on-reserve and off-reserve variations, the Aboriginal identity population is separated into four categories: North American Indians on-reserve; North American Indians off-reserve; Inuit and others; and Metis *(Figure 8)*.

Individuals in the Metis single response group display the most positive educational attainments of all the identity groups: Metis are the least likely to have withdrawn from education prior to earning a high school graduation certificate, and most likely to have earned a post-secondary diploma or degree. Those who identify as North American Indian living off-reserve are the most likely of all the identity groups to have attended university and earn a university degree, and the least likely to have earned a non-designated trade certificate. The lower post-secondary attainments for the on-reserve group are particularly noteworthy, as educational opportunities on-reserve are often limited and therefore on-reserve residents likely have to transfer off-reserve to attend colleges and universities.

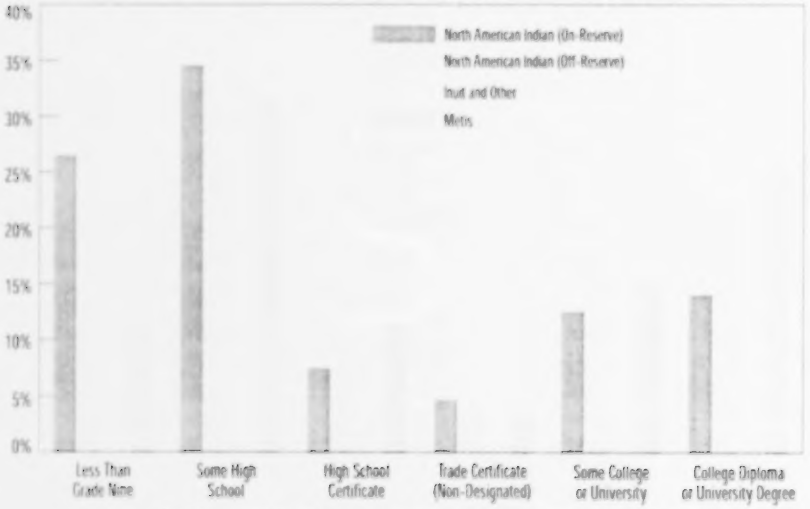
FIGURE 7: Aboriginal Residency in the West

SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

Of the three off-reserve identity group categories, no group in particular displays proportionately negative educational outcomes. In fact, all three off-reserve response groups exhibit consistently higher post-secondary participation (with the exception of the non-designated trade certificate category), and consistently lower incidences of withdrawal below grade 10 (with Metis least likely to withdraw prior to grade 10), relative to the on-reserve group.

What do these results suggest about the influence of one's identity group in relation to educational outcomes? Clearly, the Aboriginal group to which an individual identifies is not a decisive factor in influencing educational attainments. Rather, it is in the on-reserve and off-reserve variations where educational outcomes differ; all off-reserve identity groups exhibit similar educational attainments.

FIGURE 8: Educational Attainment of Western Aboriginal People by Identity



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

EDUCATIONAL ATTAINMENT: Summary of Key Findings

The analysis regarding the educational attainment of Aboriginal people has revealed the following:

- In both the West and Canada as a whole, Aboriginal students are most likely to withdraw from education between grades 9 and 10, but western Aboriginal individuals are less likely to have earned post-secondary diplomas or degrees.

- Educational attainments for on-reserve residents are consistently lower than those for off-reserve residents in all age cohorts. More than twice as many Aboriginals living on-reserve have left school before grade nine compared to Aboriginals living off-reserve.

- Within specific age groups, Aboriginal people 25-64 years old exhibit the highest educational attainments of all the age groups: approximately 25% have obtained a college diploma or university degree, and this is a positive finding given that these are the individuals of primary labour force age.

- Age cohort distinctions become particularly acute for Aboriginals aged 17-19: in total, nearly 75% of this group have earned less than a high school diploma, which is a significant majority of the high school completion cohort.

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These findings raise some important issues: what impact do specific educational outcomes have on labour force success rates? Do labour force gaps exist between the Aboriginal and general populations for all educational attainments? Do labour force and income benefits of higher education extend equally to all Aboriginal individuals in the West, both on-reserve and off-reserve? It is to these questions that the analysis now turns.

EFFECTS OF WITHDRAWING FROM EDUCATION

Education is an essential building block to future labour market outcomes. It is closely linked to positive labour force outcomes, higher employment incomes and also serves as a general quality of life indicator. Therefore it is important to understand the extent to which higher educational attainments for Aboriginal people in the West lead to improved labour market outcomes. This section analyses the employment and income implications associated with Aboriginal education attainments.

1. Labour Force Implications

To examine the relationship between educational attainments and labour force outcomes, an analysis of the three most common labour force measurements – the participation rate, the employment rate and the unemployment rate – needs to be undertaken *(see below)*. To reiterate, the population used in these analyses consists of the Aboriginal identity population 15 years and older who are currently not attending school.

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Participation Rate: The participation rate is defined as the number of individuals in the labour force (both employed and unemployed) divided by the population 15 years and older. The participation rate in general provides an indication of a group's affinity to actively seek employment and/or be employed, and implies variations in individuals' propensities to attend school, retire or become homemakers. In addition, analysis of the participation rate may detect the presence of the "discouraged worker phenomenon" – the idea that an individual withdraws from the labour force after a long period of unsuccessful job searching.

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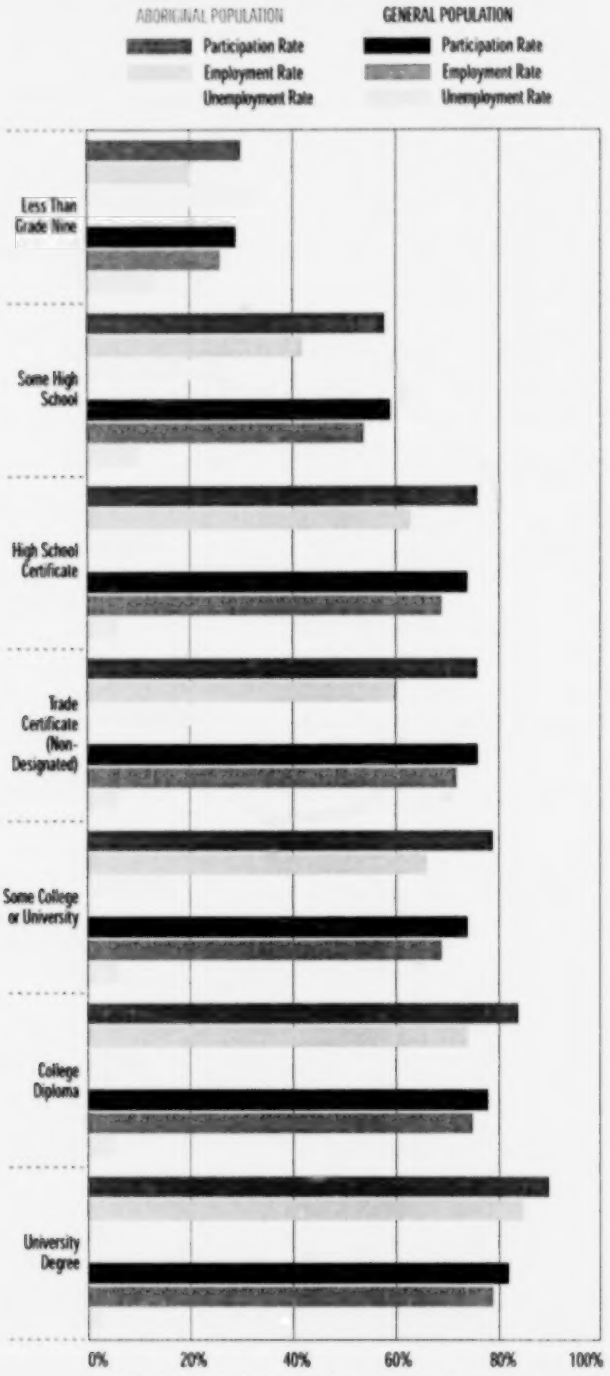
FIGURE 9: Educational Attainment and Labour Force Outcomes (Aboriginal and General Population, Western Canada)



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

(a) Variations between Aboriginal and the general population. A comparison of the participation, employment and unemployment rates between the Aboriginal and general populations in the West for specific educational attainment levels is presented in *Figure 9*. Observe that the participation rates for those individuals who possess less than grade 9 or have some high school are approximately 30% and 60% respectively, while for every other educational attainment the participation rate exceeds 70% (including the high school graduation category). In addition, the unemployment rates for individuals who have less than a high school certificate are the highest of all of the respective educational attainment categories. In other words, individuals with less than a high school diploma are the least likely to participate in the labour force, and those who do participate are the most likely to be unemployed. This is an important finding given that nearly 50% of the Aboriginal population in the West possesses less than a high school certificate.

In order to get a better idea of the relative disparity between the two groups' employment outcomes, a series of unemployment and participation rate indices for various educational attainments are presented *(Figures 10 and 11)*. These indices are calculated by dividing the percentage values for the Aboriginal population by those of the general population for each respective education category. An index value of one indicates that there is equal representation between the two groups in a particular category. An index value greater than one is indicative of proportionately more Aboriginal representation in the category, while an index value less than one is indicative of proportionately less Aboriginal representation in the category. The indices in *Figures 10 and 11* include information for the West as a whole in addition to information for each of the western provinces. This is done for comparability purposes, to control for the influence of provincial factors such as variations in minimum wage rates, employment insurance benefits and cost of living differences.

The first column of *Figure 10* indicates that, with the exception of the some high school category, the participation rate for the Aboriginal population in the West is equal to or greater than that of the general population, for all educational

attainment levels. In fact, in each of the western provinces Aboriginal individuals who have attended non-trade related, post-secondary institutions consistently exhibit higher participation rates relative to the general population. In the case of British Columbia Aboriginal people without a high school certificate participate in the labour force at a higher rate than the general population.

These are significant findings. The fact that Aboriginal individuals in the West possessing at least a high school certificate are participating in the labour force to a greater extent than the general population has positive implications for Canada's future labour supply market: there is a willingness among Aboriginal individuals to participate fully in the labour force, regardless of education levels.

It is within the unemployment indices where labour force inequalities materialize. As *Figure 11* demonstrates, for nearly all education levels, the unemployment rates for the Aboriginal population are at least twice those of the general population, and in some cases the index values are four fold.

Of particular interest are the outcomes for Aboriginal individuals who hold a non-designated trade certificate and reside in Alberta and Saskatchewan: the Aboriginal participation rates in these categories are less than those of the general population, and the Aboriginal unemployment rates are nearly five fold. Given that these high unemployment rates combine with lower participation rates, there is a strong possibility that individuals represented in these categories are characterized by the discouraged worker phenomenon.

However, the trade certificate category aside, in the majority of instances, as Aboriginal individuals earn subsequently higher certificates, diplomas or degrees, the gaps in the unemployment rate consistently diminish. These results are especially encouraging in Alberta, where the unemployment rate for Aboriginal individuals holding a university degree is actually less than that of the general population.

In summary, although the participation rates of the Aboriginal population typically exceed those of the general population for all educational attainments in the West, the incidence of unemployment for Aboriginal individuals, in general, remains considerably higher. The labour force outcomes for Aboriginal individuals who choose to earn a university degree improve substantially – the university degree participation rate exceeds that of the general population, and the unemployment index value is the lowest of all the educational attainment categories.

FIGURE 10: Participation Rate Index
(Aboriginal People in Western Canada)

	WEST	BC	AB	SK	MB
Less Than Grade Nine	1.05	1.22	0.94	0.98	1.01
Some High School	0.98	1.12	0.96	0.82	0.96
High School Certificate	1.02	1.10	1.00	0.90	1.01
Trade Certificate (Non-Designated)	1.00	1.04	0.93	0.93	1.07
Some College or University	1.07	1.11	1.04	1.02	1.07
College Diploma	1.07	1.10	1.05	1.02	1.08
University Degree	1.09	1.09	1.06	1.09	1.08

SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

FIGURE 11: Unemployment Rate Index
(Aboriginal People in Western Canada)

	WEST	BC	AB	SK	MB
Less Than Grade Nine	2.63	1.96	3.30	3.42	3.27
Some High School	2.68	2.13	2.85	3.82	3.19
High School Certificate	2.63	2.52	2.35	3.47	3.00
Trade Certificate (Non-Designated)	3.92	3.47	4.92	4.84	3.47
Some College or University	2.62	2.48	2.78	3.50	2.70
College Diploma	2.53	2.40	2.41	3.35	3.18
University Degree	1.52	1.15	0.98	3.43	2.08

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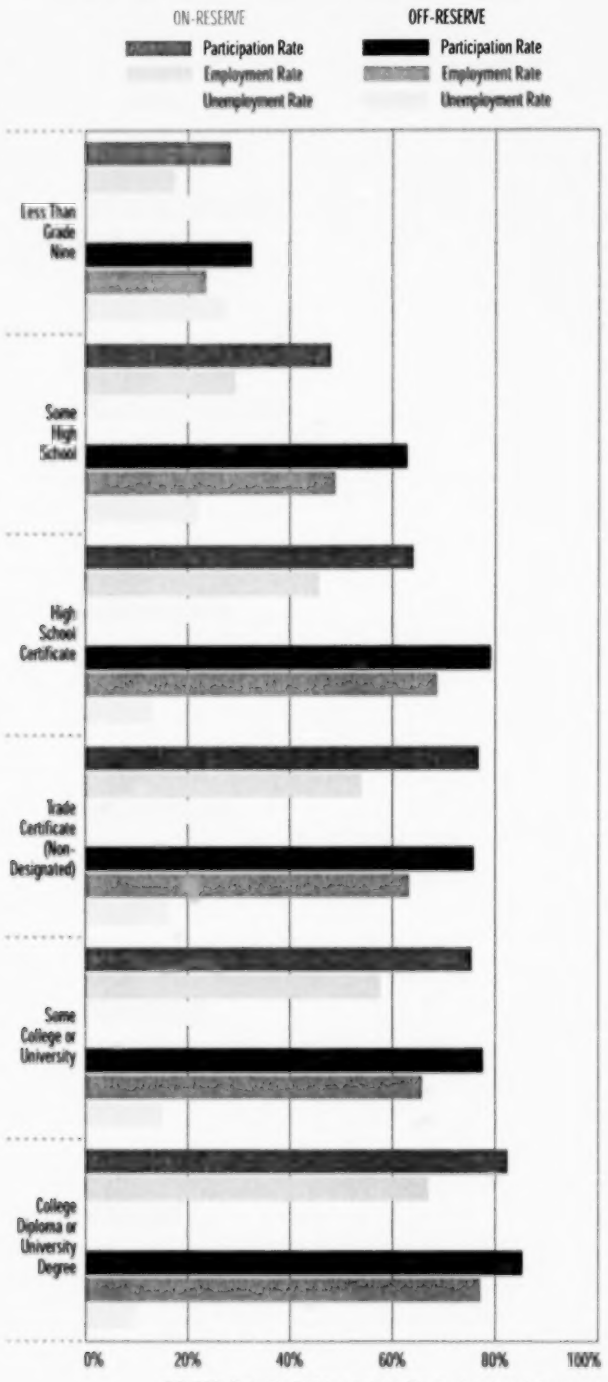
FIGURE 12: Aboriginal Education and Labour Force Outcomes (On-Reserve and Off-Reserve, Western Canada)



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

(b) Variations between Aboriginal people living on and off-reserve. Given the sizeable discrepancies between the educational attainments of individuals by residency, it is useful to identify whether the labour force benefits of higher education extend equally to all Aboriginal individuals in the West, both on-reserve and off-reserve.

For primary and secondary educational attainments, off-reserve individuals participate in the labour force in higher proportions than on-reserve individuals *(Figure 12)*, and for each respective category as individuals' educational attainments increase, so too does their propensity to participate in the labour force. In addition, unemployment rates for on-reserve individuals are generally higher. On-reserve individuals who have less than a high school graduation certificate experience an unemployment rate of approximately 40%, which decreases to just below 30% with a high school diploma. Conversely, the unemployment rate for off-reserve individuals with less than high school ranges between 20 and 30%, decreasing to approximately 12% with a high school diploma.

These residency variations may be explained to some extent by the presence of traditional economies. On-reserve residents in remote communities are likely to participate in hunting and gathering activities that are manifested in the data through lower participation rates. In fact, a labour market analysis on Australian indigenous peoples has found that factors that capture access to traditional lifestyles are strongly associated with significant declines in labour supply, as well as a lower desire to participate in the mainstream labour force (Hunter and Gray 1999).

At the post-secondary level, residency distinctions become less pronounced with education. First, the participation rates (both on-reserve and off-reserve) in all of the post-secondary categories exceed 70% (in some cases nearing 90%). Second, post-secondary unemployment rates are significantly lower than primary and secondary rates. Third, residents both on-reserve and off-reserve with a university degree participate in the labour force at approximately 90%, and the unemployment rates are nearly at parity, thus closing the on-reserve to off-reserve labour force gaps.

In general, these data indicate that obtaining a high school certificate or a post-secondary education has positive benefits for all Aboriginal individuals, both on-reserve and off-reserve. Participation rates in general increase and unemployment rates tend to diminish. For the West as a whole, residents on-reserve have the most to gain from earning a university degree: not only is there a reduction in the labour force disparities between the Aboriginal and general populations, but the on-reserve, off-reserve disparities significantly diminish – a twofold benefit.

An interesting deviation, however, is the unemployment rate associated with individuals living on-reserve holding a non-designated trade certificate, which hovers at 30%. This is an especially important observation given that the non-designated trade certificate is the only post-secondary category for which the on-reserve population has a higher representation than the off-reserve population in the West. This raises an important question regarding the extent to which education and training programs on-reserve are matched with sustainable employment opportunities.

2. Employment Income Implications

It is clear that Aboriginal labour force outcomes in the West generally improve with education. Aboriginal individuals with higher education levels are more likely to participate in the labour force, and experience greater success in securing and retaining employment. It will now prove useful to determine to what extent employment income levels vary with education, and whether the benefits extend to all Aboriginal individuals in the West both on-reserve and off-reserve in urban areas.

The employment income benefits of education can be exemplified through the career earnings of the individual. Career earnings are those that individuals can expect to earn throughout their lifetime; the employment income earnings used in this analysis are those of the Aboriginal identity population not attending school between the ages of 25-44. This age cohort is chosen for a number of reasons. First, 25 is used as the lower age limit to account for the fact that Aboriginal youth are likely to complete school later in life; therefore this age cohort includes those individuals who have had a greater opportunity to complete higher education levels. As well, using 25 as the lower age limit excludes those individuals in their late teens who are seeking jobs rather than careers, which would skew the data down. In addition, 44 is chosen as the upper limit so as to control for influences on income levels as a result of individuals over 50 who earn lower incomes due to skill deficiencies, or who experience difficulty in finding employment and earning the same high incomes in the event that they become unemployed (further labour market analyses and implications can be found in Howe 2002).

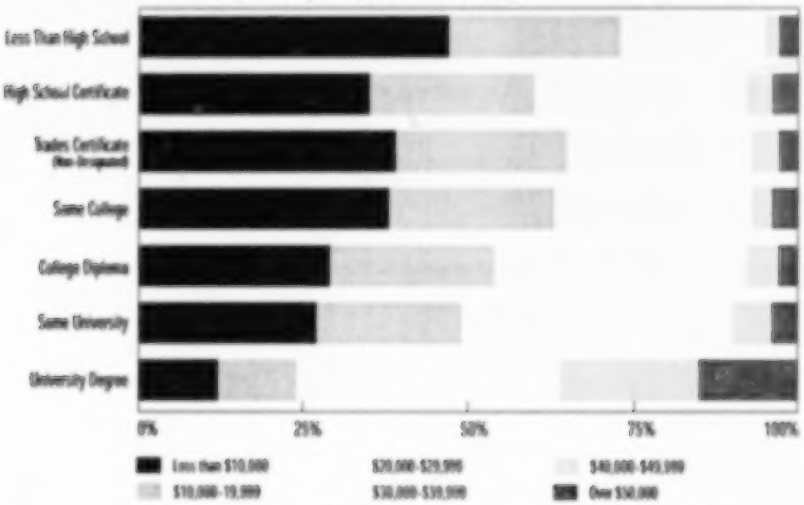
The gross annual income distributions by educational attainment for on-reserve residents and off-reserve urban residents are depicted in *Figures 13 and 14* respectively. A useful indication of the distribution of income for a particular group is the median income measurement. The median income is the income level where half of the data observations lie above this value, and half lie below. The analyses contained in this section focus on median income ranges rather than on specific values.

Observe that at the less than high school education level, for each group the median income range is $10,000-$19,999. In fact, on-reserve, nearly 75% of individuals earn under $20,000. But, income distributions generally improve with education. For off-reserve urban residents, the high school certificate and post-secondary median income ranges are nearly all in the $20,000-$29,999 range, and the median income range for a university degree (for both groups) is $30,000-$39,999, a $20,000 increase over the median range for having less than a high school certificate.

On-reserve improvements are most clearly illustrated in the lower income range proportions. The less than $10,000 range is the most notable example: almost 50% of on-reserve residents without a high school certificate earn under $10,000, but this value is reduced to 35% in the high school certificate category, and drops to approximately 10% with a university degree. What do these findings reveal? Higher education levels are associated with sizably lower proportions of individuals earning less than $10,000, an earnings range well below any measure of prosperity.

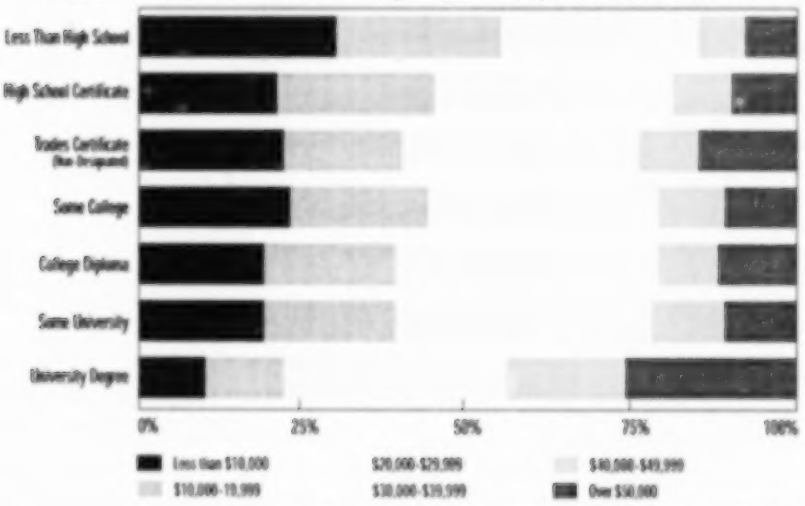
Comparing the income distributions of on-reserve residents to off-reserve urban residents directly reveals some interesting variations. The median income range on-reserve for a high school certificate, non-designated trade certificate or college diploma is $10,000-$19,999, but off-reserve in urban areas the median income range for these categories increases to $20,000-$29,999 . At the university degree level, although the median income range for both groups is $30,000-$39,999, nearly twice as many urban Aboriginal people are earning over $50,000.

FIGURE 13: On-Reserve Aboriginal Incomes by Educational Attainment



SOURCE: Derived by CWF from Statistics Canada. Includes only those over 15 years of age not attending school.

FIGURE 14: Urban Off-Reserve Aboriginal Incomes by Educational Attainment



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Recall that at the university degree level, the labour force gaps between on-reserve residents and off-reserve residents disappear. These findings raise an interesting question: is there reason to suspect the existence of an on-reserve, off-reserve urban income gap for all education levels? The answer to this question is somewhat complex.

First, there is the issue of tax exemption benefits available to on-reserve residents. Fact sheets at Indian and Northern Affairs Canada identify that the personal property of an Aboriginal individual or band situated on a reserve is tax exempt, and the employment income earned by a status Indian working on a reserve is also considered tax exempt (INAC 2002). These facts suggest that although the gross income of on-reserve residents may be less than that of off-reserve residents, the take-home income of these two groups may be more equitable than the data indicate.

One consideration to note is that if employment duties are performed off-reserve an individual's income will be subject to applicable taxes. It is not known to what extent on-reserve residents earn income off-reserve or in what proportions. However, it is likely the case that less remote reserve communities have a higher proportion of residents earning income off-reserve. In addition, some reserve bands have expanded tax powers that allow the bands to impose sales taxes within their communities. Although these taxes may diminish the net incomes of on-reserve residents, the effect is likely to be marginal.

One way to account for the influence of on-reserve tax exemption benefits on gross income levels is to focus on the university degree category. Individuals who hold university degrees are considered to be a highly mobile group, and in order for employers to retain these individuals, remuneration must reflect the market price for university skills, otherwise the university degree holder will seek higher compensation elsewhere. Therefore, assuming remuneration at the university degree level is at parity for all residency regions, on-reserve/off-reserve urban income variations for this education level will provide an estimate of the on-reserve tax exemption effect. This is a logical assumption given the fact that residency income variations at the university degree level in *Figures 13 and 14* are the most pronounced at higher income ranges. This reflects the current progressive off-reserve tax scheme: at lower income ranges (where off-reserve income taxes are lower) off-reserve gross incomes are nearer off-reserve net incomes, and therefore on-reserve/off-reserve gross incomes are directly comparable. As incomes rise, taxes are progressively higher off-reserve. Therefore, although off-reserve gross incomes are relatively higher, off-reserve net incomes are closer to on-reserve net incomes.

If university degree category variations serve as an accurate measure to capture on-reserve tax exemption benefits, the fact that a higher proportion of on-reserve residents are earning less than $10,000 for each education level below the university degree category depicts a significant income gap at this low income range. In addition, the lower on-reserve median income ranges at the high school certificate, non-designated trade and college categories indicate lower on-reserve incomes despite the tax exemption benefits, given that these median income ranges occur at the lower end of the income scale. Therefore on-reserve tax exemption benefits do not entirely account for the residency income gap.

How do Aboriginal employment income levels compare to those of non-Aboriginal individuals? A recent report produced by the C.D. Howe Institute identified some of the income variations between the Aboriginal and non-Aboriginal populations in Canada (Richards and Drost, 2003). In 1995 the median income for Aboriginal individuals in Canada over 15 was 58% that of non-Aboriginal individuals. At the same time, two thirds and one half of on-reserve and off-reserve Aboriginals respectively had less than a high school diploma, compared to one third for the non-Aboriginal population. Furthermore, a Statistics Canada study on income and labour market outcomes for post-secondary Aboriginal graduates found that Aboriginal university graduates in Canada earned on average 6% more than other university graduates, and Aboriginal college graduates earned on average the same wages as other college graduates (Wannell and Caron 1994). Therefore although a sizable income gap exists between Aboriginal and non-Aboriginal Canadians, at higher education levels the gap disappears, and at the university degree level Aboriginal employment incomes exceed those of non-Aboriginals.

3. The Private Returns to Education

When assessing whether the benefits of higher education extend to all Aboriginal individuals in the West, it is useful to determine the relationship of educational attainments to income and employment outcomes combined, given that education is related to both employment outcomes as well as income levels. This section investigates the likelihood that an individual with a specific educational attainment will retain employment and earn a particular income while in the labour force (i.e., the private returns to education).

Private returns to education are calculated by multiplying the employment rate by the proportion of individuals in an income bracket for a particular education level, for Aboriginals 25-44 not attending school. Returns are presented in *Figures 15 and 16* for on-reserve and off-reserve urban residents respectively. The values are indexed using the under $10,000 category as the base category, which is set equal to one. The income bracket that has the highest index value for a specific education level is the income range that an individual will most likely be in for that educational attainment.

To illustrate, take for example row 2 of *Figure 15*, which represents the private returns to education for an individual who has a high school certificate and lives on-reserve. This person will most likely earn less than $10,000 per year (the highest index value in this category), and will least likely earn over $50,000 per year (the lowest index value in this category).

FIGURE 15: Private Returns to Education by Highest Level of Schooling
(Aboriginal People in Western Canada Living On-Reserve and Aged 25-44 Years)

	< $10,000	$10-$19,000	$20-$29,999	$30-$39,999	$40-$49,999	$50,000 +
Less Than High School Certificate	1.00	0.55	0.33	0.12	0.05	0.05
High School Certificate	1.00	0.72	0.62	0.30	0.12	0.11
Trade Certificate (Non-Designated)	1.00	0.66	0.53	0.22	0.10	0.08
Some College	1.00	0.66	0.54	0.28	0.09	0.10
College Diploma	1.00	0.85	0.84	0.45	0.17	0.12
Some University	1.00	0.81	0.92	0.61	0.23	0.15
University Degree	1.00	1.04	1.13	2.43	1.87	1.35

SOURCE: Derived by CWF from Statistics Canada. Includes only those from 25-44 years of age, living on-reserve and not attending school.

FIGURE 16: Private Returns to Education by Highest Level of Schooling
(Aboriginal People in Western Canada Living Off-Reserve in Urban Areas and Aged 25-44 Years)

	< $10,000	$10-$19,000	$20-$29,999	$30-$39,999	$40-$49,999	$50,000 +
Less Than High School Certificate	1.00	0.84	0.60	0.41	0.24	0.28
High School Certificate	1.00	1.14	0.99	0.69	0.44	0.45
Trade Certificate (Non-Designated)	1.00	0.82	0.97	0.70	0.42	0.71
Some College	1.00	0.92	0.84	0.62	0.41	0.51
College Diploma	1.00	1.02	1.22	0.88	0.49	0.62
Some University	1.00	1.00	1.03	0.91	0.56	0.53
University Degree	1.00	1.16	1.37	1.96	1.71	2.55

SOURCE: Derived by CWF from Statistics Canada. Includes only those from 25-44 years of age, living off-reserve and not attending school.

Focusing now on row 2 in *Figure 16* (representing the private returns to education for an individual who has a high school certificate living off-reserve in an urban area), this individual will most likely earn $10,000-$19,999 (the highest index value in this category), and will least likely earn $40,000-$49,999 (the lowest index value in this category). Index values for the two data sets are also directly comparable: off-reserve urban residents who have a high school graduation certificate *(Figure 16 row 2)* are at least twice as likely to earn over $30,000 than under $10,000, compared to residents on-reserve *(Figure 15 row 2)*.

Focusing on-reserve, the data in *Figure 15* show that Aboriginal people in any educational attainment category (with the exception of the university degree category) are most likely to earn under $10,000. This is not an encouraging finding. However, the data also indicate that an individual on-reserve who has a high school certificate is more than twice as likely to earn over $30,000 than under $10,000, compared to an individual on-reserve who has less than a high school certificate. In addition, the private returns to education on-reserve are the most strongly exemplified in the university degree category, where individuals are 2.4 times more likely to earn $30,000-$39,999 than to earn under $10,000.

Off-reserve urban residents display significantly better results *(Figure 16)*. Those with a college diploma or who attended university but did not earn a degree will most likely earn $20,000–$29,999, while high school graduates will most likely earn $10,000–$20,000. In fact, for all off-reserve urban education levels, the probability that individuals earn over $50,000, rather than under $10,000, is often double that of on-reserve individuals. As well, off-reserve urban Aboriginal individuals with a university degree are 2.5 times more likely to earn over $50,000 than to earn under $10,000 – a strong contrast against on-reserve residents who are only 1.3 times more likely to earn over $50,000 with a university degree.

Summing all of the index values across a row provides an indication of the total private returns to each particular level of education. The higher this value the better the private return to the education level. The total private returns for each of the two groups in *Figures 15 and 16* are given in the first and second columns of *Figure 17*.

FIGURE 17: Total Private Returns to Education
(Aboriginal People in Western Canada, Aged 25-44 Years)

	On-Reserve Residents	Urban Off-Reserve Residents
Less Than High School Certificate	2.10	3.37
High School Certificate	2.87	4.71
Trade Certificate (Non-Designated)	2.59	4.62
Some College	2.67	4.31
College Diploma	3.43	5.23
Some University	3.72	5.03
University Degree	8.82	9.75

SOURCE: Derived by CWF from Statistics Canada. Includes only those from 25-44 years of age and not attending school.

It is encouraging to note that, as with previous findings, as individuals both on-reserve and off-reserve in urban areas earn subsequently higher certificates, diplomas or degrees the total private returns generally improve. This is illustrated by the fact that for each respective residency group, the lowest total private returns are seen by those with less than a high school certificate, and the highest values are seen by those with a post-secondary degree or diploma. In each instance the off-reserve urban index values exceed those of the on-reserve index values. But at the university degree level, the total private returns are the closest to parity, a finding that is likely the result of residency employment rates and employment incomes at this education level being nearly equal. However, for all non-university levels, off-reserve urban total private returns are at least 1.5 times greater than on-reserve total private returns. Therefore although returns at the university degree level extend to all Aboriginal people in all residency areas, the returns to lesser educational attainments are lower for individuals residing on-reserve.

LABOUR FORCE AND EMPLOYMENT INCOME: Summary of Key Findings

The analyses of the effects of Aboriginal education on labour force outcomes and employment income levels have identified a number of key findings, all of which associate high education levels with positive outcomes.

Labour Force Implications

- Western Canadians, both Aboriginal and non-Aboriginal alike, who have less than a high school diploma are the least likely to participate in the labour force, and those who do participate are also the most likely to be unemployed. This is an important finding given that nearly 50% of the Aboriginal population in the West is represented in this category.

- Aboriginal individuals in the West possessing at least a high school graduation certificate are participating in the labour force to a greater extent than the general population.

- A significant amount of unemployment disparity exists between the Aboriginal and general populations for nearly all educational attainments in the West, and this disparity diminishes as Aboriginals earn subsequently higher certificates, diplomas and degrees. At the university degree level in Alberta, the advantage actually favors the Aboriginal population.

- For each educational attainment, residents on-reserve exhibit lower participation rates and higher unemployment rates that residents off-reserve, the only exception being the university degree category where residency labour force outcomes are nearly at parity.

- Residents on-reserve have the most to gain from earning a university degree: there is a reduction in the unemployment disparity between the Aboriginal and general populations, and the on-reserve/off-reserve labour force variations nearly disappear – a twofold benefit.

FIGURE 15: Private Returns to Education by Highest Level of Schooling
(Aboriginal People in Western Canada Living On-Reserve and Aged 25-44 Years)

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- Residents on-reserve have the most to gain from earning a university degree: there is a reduction in the unemployment disparity between the Aboriginal and general populations, and the on-reserve/off-reserve labour force variations nearly disappear – a twofold benefit.

Employment Income Implications

- Aboriginal income distributions both on-reserve and off-reserve in urban areas consistently improve with higher education levels. In general, individuals with less than a high school graduation certificate will most likely earn under $10,000, and individuals with a university degree will most likely earn over $40,000.

- For each educational attainment there is a sizable on-reserve/off-reserve urban income gap. Income distributions on-reserve are consistently less positive than those off-reserve in urban areas. The median income range on-reserve for a high school certificate, trades certificate or college diploma is $10,000-$19,999, but off-reserve in urban areas the median income range increases to $20,000-$29,999 for these categories.

- On-reserve tax exemption benefits may reduce the on-reserve/off-reserve urban employment income distribution disparity, although likely not enough to account for the entire residency income gap.

The Private Returns to Education

- The private returns to education for on-reserve and off-reserve urban residents improve as individuals earn subsequently higher certificates, diplomas or degrees. An individual on-reserve who has a high school certificate is more than twice as likely to earn over $30,000 than under $10,000, when compared to an individual on-reserve who has less than a high school certificate.

- The potential private returns are the highest at the university degree level. Aboriginal individuals off-reserve in urban areas and on-reserve are respectively 2.5 and 1.3 times more likely to earn over $50,000 than earn under $10,000 .

- The private returns to education do not extend equally to all residencies. In fact, for all off-reserve urban Aboriginal education levels, the probability that individuals earn over $50,000 is often double that of on-reserve residents.

- Comparing the total private returns of off-reserve urban to on-reserve areas, it becomes apparent that with the exception of the university categories, off-reserve urban returns are at least 1.5 times greater than on-reserve returns.

MACROECONOMIC IMPLICATIONS

Improved Aboriginal educational attainments are a benefit to the Canadian economy as a whole. The potential returns associated with earning a high school graduation certificate alone are significant. Cost-benefit estimates of educational investments in Canada often exhibit positive results at the primary and secondary levels, even under the most stringent of conditions (Constantatos and West 1991). As well, many of these analyses are unable to include external benefits associated with education such as health improvements and increased levels of innovation, which lead to an understatement of the actual returns. Additionally, there are a number of studies that have documented the relationship between dependency on government transfers and education levels. Hull (1996) finds that dependency levels diminish significantly for Aboriginal individuals in Canada who earn at least a high school diploma, in relation to those who have less than a grade nine education. Given that approximately 50% of the Aboriginal population in the West possesses less than a high school diploma, the sheer magnitude of economic benefits that can accrue as a result of Aboriginal high school completion rates equaling those of non-Aboriginals is substantial.

Furthermore Canada is projected to experience a sizable labour supply shortage in the decades ahead – especially in the trade sectors. The actuarial report of the Office of the Superintendent of Financial Institutions (2003) states that the number of labour force retirees will exceed the number of individuals entering the labour force by 2015. Given the high relative proportion of Aboriginal individuals possessing trade certificates, Aboriginal people present a unique opportunity to satisfy future trade labour shortages. The challenge lies in ensuring that these individuals receive training in disciplines where sufficient demand for skills exists – especially in on-reserve communities, where fewer financial resources and opportunities are available. But the

potential contribution of Aboriginal people to the future prosperity of Canada is not limited to trade specific sectors, it extends to all areas of the economy. This is demonstrated through the positive labour force, employment income and high private returns to education that are characteristic of all Aboriginal individuals possessing college diplomas and university degrees.

The key objective for policy-makers lies in ensuring that Aboriginal youth stay in school. But what are the strategies that must be employed to ensure that this objective is achieved? A positive outcome is not a foregone conclusion: there are a number of social and economic circumstances that mitigate against positive outcomes. These realities are not often captured in quantitative data. How can these factors be identified and addressed when devising strategies to improve educational attainments among Aboriginal youth? It is to these questions that the analysis now turns.

WHAT ARE THE PROMISING PRACTICES FOR ENCOURAGING ABORIGINAL YOUTH TO REMAIN IN SCHOOL?

The Canada West Foundation has identified a set of promising practices – defined as ideas, concepts and strategies that work – to help ensure that Aboriginal youth remain in school. They are based on evidence from key informant interviews with individuals directly involved in Aboriginal education and labour market areas – including government representatives, educators at primary, secondary and post-secondary institutions, representatives of private industry, Aboriginal awareness seminar providers, Aboriginal and non-Aboriginal service delivery organizations, and members of Aboriginal political organizations. They are derived from qualitative methods in order to take into account the experiences and expertise of individuals directly involved in Aboriginal labour market areas, and to ensure the inclusion of factors not captured in quantitative data.

The promising practices pertain to everyone involved in Aboriginal education and labour market issues: educational program and service providers, employers, various government organizations, employees and members of the Aboriginal community. Although at first glance many of these ideas may not necessarily be new or innovative, the ideas were strongly emphasized by the interview respondents. Thus individuals seeking to increase opportunities for Aboriginal people may wish to re-evaluate current policies and programs to ensure that the "obvious" promising practices are in fact being practiced. It should also be noted that while the promising practices are specifically targeted to enhancing the employment success of Aboriginal individuals, they could be used to enhance the employment success of non-Aboriginal people. Indeed, many of the ideas and strategies are relevant to all human resource and development departments within the Canadian economy.

1. Promote the Dissemination of Educational Service Information

One of the prevalent themes of the interviews was the need for all parties to exchange information regarding educational options and opportunities at their disposal. All of the programs, policies and initiatives discussed by interview respondents placed a strong emphasis on ensuring that all interested parties are aware of the choices and programs available. This is a tactical approach that focuses on communicating the relevant information to the respective group.

(a) Communicate the benefits of education. An interview subject employed in the educational service delivery sector discussed a successful program whereby Aboriginal students immersed in post-secondary education would go to a community and speak to students at primary and secondary schools, iterating their experiences and the positive benefits associated with staying in school. The effects of this approach were twofold. First, the students attending the primary and secondary schools saw first hand the importance of staying in school, and second, speaking to community members reinforced the resolve and willingness of the post secondary student to succeed, further committing the individual to his of her educational goals. However, similar initiatives should be implemented with caution; it was reported that a student who spoke to a community told the class to drop out of their high school and enroll in the same program as this student was in. Another idea used by an interview respondent was that of exposing students to the careers of successful adults who were well educated, and then "giving the students a week on a shovel." The students would return to school with an increased desire to learn.

(b) Help establish and identify goals: Discussions with Aboriginal youth regarding career and educational aspirations help create a connection between current educational decisions and future career outcomes. Interview respondents discussed the benefits of having career counselors within communities and at urban educational institutions who are able to consult one-on-one with the youth and refer them to the "next step" for achieving career and educational goals. Counseling services also provide a medium for communication between the school and the parents, whose input is critical to the educational progress of the student. Interviewees emphasized encouraging students to "reach for the stars," given that students are likely to connect with careers that they perceive as being achievable. The presence of mentors in senior level employment positions exemplifies this point.

(c) Seek feedback: Listening to the students and obtaining feedback was a concept prevalent throughout the interviews. Providing a medium for student and community responses allows for the opportunity to improve program delivery that may otherwise escape the vigilance of the service providers. As well, it is important to seek and obtain feedback from business communities and government organizations when developing programs and coordinating market opportunities.

2. Focus on Incentive Structures and Market Effectively

Interviewees highlighted the significance of focusing on the motivations of all individuals when implementing initiatives geared towards improving educational outcomes.

(a) Aboriginal families' and communities' incentives: Community and family views of education play a role in influencing Aboriginal youths' decisions to attend school. According to respondents, some communities place little value on being educated outside of the community. There is a perception that when a graduate returns home from earning an education, that individual has undergone a transformation whereby the graduate no longer thinks similarly to those in the community.

As well, parents may be reluctant to send their children away for primary or secondary education, even though school services may only be offered up to grade six within the community. When recalling his reaction to the idea of sending his children away to attend high school, one interviewee said, "There is no way I am sending my children away every day just so they can go to school. I would rather have them stay home close to me."

One post-secondary education service provider addressed this issue when he talked about how his organization would bring programs to the communities, given a critical mass of students (approximately 10-20), and would rotate the program around neighboring communities. Programs that worked the best were the ones that produced visible improvements within the community, so that the benefits of the program were transparent.

However, in the event that a program could not be transferred to a community, another respondent discussed initiatives in urban facilities such as inviting elders to the school to perform traditional ceremonies, and having family members meet with the entire network of contacts that the students would interact with, including the teachers and counselors, or inviting family members on field trips. One interviewee stated, "When designing programs directed at students between the ages of 12 and 14, it is important to focus on the families as well as the students, otherwise the programming is a waste of money."

(b) Aboriginal students' incentives: Aboriginal students are influenced by their own perceptions as well. A friendly and engaging learning environment positively reinforces individuals' commitment to learning, and creates a sense of responsibility.

Concepts such as open door policies, small class groupings and the presence of positive peer groups were emphasized throughout the interviews as a means to reduce negative experiences, while diminishing students' preconceptions of a faceless, indifferent administration. As well, many Aboriginal people place a high value on retaining traditional languages and promoting culture, and Aboriginal students are likely to withdrawal from school early as a result of boredom. Some school boards have addressed these issues by incorporating Aboriginal course content into the K-12 curriculum.

In addition to emphasizing the connection between education and future income, it is important to ensure that students are able to maintain a sustainable existence during the course of their education. The future benefits of staying in school are

discounted in the present, especially when social circumstances do not permit individuals to forgo income sources. For instance, Aboriginal people are more likely to be raised in a single parent household than non-Aboriginal people, which translates into greater household responsibilities for the student who is a single parent, or the student who comes from a single parent family. Educators must also be aware when developing curriculum requirements for Aboriginal individuals that social factors such as access to childcare funding or affordable housing, the health status of the individual and over-crowded living arrangements may influence how students perform.

An idea that speaks to the incentives of post-secondary students is that of conditional training allowances (especially in trade related industries) that emphasize the connection between income and education, and reduce the negative connotation one associates with being on social assistance. Other ideas that delegate responsibility to the student include scholarships that have community service requirements, so that the recipient must give something to the community in exchange for financial aid.

(c) Incentives of private industry: It is important to target the incentive structures of the business community so that private industry has a vested interest in ensuring that Aboriginal youth stay in school. For instance, one respondent discussed how she was involved in an Aboriginal student-training program that had partnership arrangements with specific companies. Initially, the training and wages were subsidized by external sources. However, as a result of the programs being focused on the specific needs of the particular businesses involved, many programs no longer required subsidization – once investing in the programs constituted sound economic sense the respective businesses began covering the entire cost of the training and wages for the Aboriginal students.

3. Take Coordinated Approaches

A fundamental concept that emerged from the interviews was the idea of taking coordinated approaches. Coordinated approaches benefit from the cooperation and expertise of all parties by balancing potential labour resources with business and development opportunities, while at the same time taking into consideration underlying social circumstances.

(a) Emphasize partnerships: There is a need for long-term collaborative partnerships among private industry, government organizations, educators and Aboriginal communities if initiatives are to successfully tap into the labour market potential of Aboriginal individuals and satisfy the future employment requirements of private industry. Educational services that are complemented with employer work hours, mentoring and community service components enhance the quality of the education that the student receives and empowers the student with the skills required to secure career employment. As well, partnerships take advantage of the experiences of individuals directly involved who understand what types of ideas work for ensuring effective program delivery.

One interviewee discussed a program that provided high school credits to on-reserve students for participating in apprenticeships programs, thus allowing the students to earn wages and get job training while gaining experience both within the community and in urban settings. This particular approach provided valuable labour market exposure for the Aboriginal students as well as life skills development opportunities.

Another organization set up an education and training program that was funded from the pooled resources of multiple communities; this program used the funds to subsidize companies who participated in pre-apprenticeship and mentoring programs for Aboriginal students.

There are many other advantages of partnerships. One is the creation of trust: an educational service provider discussed how a program partnership established with a reserve community led to repeat business with that community, as well as business opportunities with other reserve communities through positive word of mouth.

But the primary impediment to partnership successes is the large set up costs associated with initiating these programs. Establishing education structures and programs that attract Aboriginal students and satisfy the employment requirements of private industry necessitates a considerable investment of financial resources, time and personal effort. As a result of these contingencies, opportunities often go unrealized.

(b) Communicate Effectively: The limited success of specific ideas, programs and initiatives is largely the result of poor communication among those involved. For instance, program overlap can exist in many Aboriginal fields, especially in urban Aboriginal areas, as Hanselmann (2002) describes: "Much of the programmatic activity of governments and non-profit organizations appears to be undertaken in the absence of a clear understanding of the programming already in place ... this has resulted in urban Aboriginal programming that is largely disjointed and at times incoherent."

Interested parties must be aware of the opportunities and programs that are available. Aboriginal students need to know if there are education services out there that allow them to gain work experience and earn wages while attending school, or provide them with funding opportunities such as scholarships, childcare assistance or living allowances. Conversely, businesses need to know whether partnership initiatives or program funds exist that encourage participation in Aboriginal apprenticeship or mentoring programs.

Internet or telephone services that act as clearing houses for students, educators and employers to advertise education and workplace programs, and scholarships are only one means that governments and educators are using to get the information out to those who benefit from it. Broadband access can also serve as a medium for distance learning, alleviating some of the demand for educators in rural communities.

(c) Allocate responsibility: Almost as important as partnerships and effective communication strategies is the ability of programs to address and adapt to unforeseen circumstances. Respondents talked about how students – especially those in urban areas – have difficulty receiving funding for such things as health care, living allowances, life skills training and child care. In other cases, students did not qualify for program eligibility based upon status criteria. Respondents communicated frustration at not being able to assist students in these circumstances. One policy that some interview respondents practice is that of budgeting extra funds (slush funds) at the onset of program initiatives for unforeseen circumstances and project costs, funds which are then distributed on an ad hoc basis.

4. Concentrate on Incremental Progress

The words of one interview respondent are instructive: "You cannot change everything all at once; choose your battles, and fight them well."

(a) Focus on feasibility and set achievable goals: One educational service provider discussed how he had to ensure that he was not overwhelming students when developing course requirements, given that some students' home lives were not conducive to studying. Things such as over-crowded housing, a lack of electricity, night shift employment, and a lack of adequate study spaces necessitated light homework loads. As one interview respondent stated, "The education programs that we bring to the communities should only demand from the students what is within their capacity to accomplish. However, this does not preclude the need to challenge the students to perform."

(b) Recognize accomplishments: Setting achievement benchmarks that not only measure progress but also acknowledge success and hard work is a concept that interview respondents found is an effective tool for reinforcing students' incentives to attend school. In addition, organizations that advertise past contributions to educational programs and initiatives help the students to understand that efforts are being made to improve outcomes.

(c) Ad hoc programming: If there is one underlying theme within all of the interviews, it is the notion that no two individuals, communities, programs, institutions or organizations are identical. Circumstances vary – what works in some situations may not necessarily work in others. Policy-makers must be prepared to accommodate diverse circumstances through methods of policy devolution, and to allow for autonomy in individual-specific programming. In the words of one respondent, "What we try to do with our educational programs is facilitate the growth of the community, regardless of whatever development stage they are at. The focus must be on investing in people."

5. Maximize Returns and Support Sustainable Outcomes

Given that program funding is a scare resource, it is important to invest strategically in initiatives that have sustainable, long-term, transferable benefits. The following approaches are the ones that have the most positive results.

(a) Equate supply to demand. Education and career training programs must be balanced with available opportunities – especially within on-reserve and rural communities. It is counter-productive to have an excess supply of individuals trained in a specific field, while excess demand exists for employees in other economic sectors. According to the Conference Board on Canada's socio-economic report on western Canada (2003), many of the economic opportunities available to rural Aboriginal communities in the West are in areas such as parks and recreation, tourism, cultural heritage, traditional economies and resource management. Focusing on sustainable initiatives is the key.

(b) Identify and encourage transferable skill sets. Primary and secondary curriculum requirements that promote transferable skills such as critical thinking, problem solving, time management, communication and interpersonal skills were emphasized in the interviews as being the most successful. In the event that economic development opportunities or career aspirations change, transferable skills serve as adjustment tools for empowering individuals with the ability to adapt.

In summary, Canada West's research identified five promising practices for ensuring that Aboriginal youth remain in school:

- *Promote dissemination of educational service information;*
- *Focus on incentive structures and market effectively;*
- *Take coordinated approaches;*
- *Concentrate on incremental progress; and*
- *Maximize returns and support sustainable outcomes.*

All parties involved in Aboriginal education and labour markets can implement these promising practices successfully. For instance, government agencies and public service providers could allow for some degree of budget flexibility when resource or service requirements arise that do not fall into any specific jurisdiction. Government organizations could also establish agencies that subsidize partnership initiatives among educators, Aboriginal groups or communities, and private industry, so that the initial investment costs of long-term partnerships are reduced, encouraging participation in Aboriginal human capital partnerships. Educators could promote environments that encourage Aboriginal family members to visit relatives and educators at schools, or design programs with flexible course loads that challenge Aboriginal students, yet at the same time make achievable demands. Aboriginal organizations and communities can coordinate with educational service providers and/or private industry to create mutually beneficial employment programs and education initiatives that address the needs of both private industry and the individual. These are but a few examples of how the promising practices can be applied.

CONCLUSION

Ensuring that Aboriginal people have the education, training, and skills necessary to fully participate in the economy is one of Western Canada's most important challenges. *Encouraging Success* has identified a number of education and labour force realities surrounding Aboriginal individuals in the West. Numerous economic and social benefits are realized when Aboriginal people achieve high educational successes, and without exception as Aboriginal people earn subsequently higher certificates, diplomas, or degrees, Aboriginal incomes and employment rates improve. This is most clearly illustrated at the university degree level, where Aboriginal employment and participation rates exceed those of the general population, while Aboriginal unemployment rates are the lowest for all education attainments. In addition, and as the literature findings demonstrate, these benefits extend beyond the individual to the Canadian economy as a whole, and are realized through reductions in social service expenditures and increased economic prosperity.

Aboriginal education and labour force outcomes vary substantially by area of residency. On-reserve residents are likely to have left school sooner than off-reserve residents:

more than twice as many Aboriginal people on-reserve have withdrawn before grade nine, and on-reserve employment and net income levels in general are lower than those off-reserve, although this disparity disappears at the university degree level. Thus, high returns to education exist for all Aboriginal individuals, especially at the university degree level. The key challenge lies in devising and implementing strategies that are effective in ensuring Aboriginal youth attain high education levels. Currently, almost 50% of Aboriginal people in the West have less than a high school graduation certificate, and this finding includes 75% of Aboriginal people aged 17-19, which is a significant majority of the high school completion cohort. These findings reinforce the fact that status quo policies are not sufficiently addressing the human capital needs of Aboriginal youth. Strategies geared towards improving Aboriginal education and labour outcomes have to increasingly focus on what works. Tapping into the expertise of individuals directly involved holds the key to ensuring success.

The promising practices identified in *Encouraging Success* provide a general blueprint of ideas and strategies, for policy-makers and other organizations to consider when seeking to improve human capital opportunities for Aboriginal youth. They concentrate on a wide variety of Aboriginal education and labour programming areas, but the bottom line is the same: positive progress needs to begin at the ground level. The incentives of all individuals and groups involved must be taken into account at the onset of education and labour initiatives, especially those with partnership components - for just as no two individuals are identical, neither are any two businesses. Significant investments of time, financial resources and personal effort will likely be required to ensure success, but none the less the individual, economic and social returns to these investments are likely to exceed the costs. All Canadians, Aboriginal and non-Aboriginal alike, have a vested interest in ensuring Aboriginal youth are provided every opportunity to gain the human capital necessary to compete fully and successfully in the labour market. ■

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